Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:
2004 Klamath Basin Rangeland Trust Lidar : Wood River, OR

1.2. Summary description of the data:
The Klamath Basin Rangeland Trust contracted with a vendor, Watershed Sciences, Inc (WSI) to collect high resolution topographic data for a portion of the Klamath watershed. The 2004 Wood River project area was collected on September 26th & 27th, 2004. The survey area encompassed the Wood River floodplain from Agency Lake at the southern edge to Annie Creek in the north. The data were collected using an Optech ALTM 3100 LiDAR system set to acquire points at average spacing of 8 points per square meter for parallel overlapping areas. The total area of delivered data equals 62,195 acres.

NOAA OCM received the data from Oregon Department of Geology & Mineral Industries (DOGAMI) / The Oregon Lidar Consortium (OLC).

In addition to the processed lidar point data, a bare-earth digital elevation model (DEM) was also received by NOAA's OCM and is available through the Related Items section, below.

1.3. Is this a one-time data collection, or an ongoing series of measurements?
One-time data collection

1.4. Actual or planned temporal coverage of the data:
2004-09-26 to 2004-09-27

1.5. Actual or planned geographic coverage of the data:
W: -122.10187, E: -121.917483, N: 42.76094, S: 42.525246
Wood River, OR

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Model (digital)

1.7. Data collection method(s):
(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy,

research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:
NOAA Office for Coastal Management (NOAA/OCM)

2.2. Title:
Metadata Contact

2.3. Affiliation or facility:
NOAA Office for Coastal Management (NOAA/OCM)

2.4. E-mail address:
coastal.info@noaa.gov

2.5. Phone number:
(843) 740-1202

3. Responsible Party for Data Management
Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

3.2. Title:
Data Steward

4. Resources
Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?
Yes

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):
Unknown

5. Data Lineage and Quality
NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible
(describe or provide URL of description):
Lineage Statement:
Watershed Sciences Inc. has collected Light Detection and Ranging (LIDAR) data in the Wood River Study Area.   NOAA OCM has taken the data and ingested it into the Digital Coast Data Access Viewer for distribution.

Process Steps:
- Acquisition.   The Optech 3100 system was set to a 100kHz laser repetition rate and flown at 1,000 meters AGL, capturing a 36o scan width (18 o from NADIR). These settings yielded an average spacing of 8 points per square meter. The entire area was surveyed with opposing flight line overlap, to reduce laser shadowing and increase surface laser painting. A section was flown with both opposing flight line overlap and orthogonal flight line overlap. While the system allows up to four range measurements per pulse, only the first and last returns were processed in the output. The data stream from the IMU was stored independently during the flight, differentially corrected and integrated with LiDAR pulse data during post processing. Throughout the survey two dual frequency DGPS Trimble 5700 base stations recorded fast static (1 Hz) data.
- Processing.   Laser point return coordinates were computed using the REALM software suite based on independent data from the LiDAR system (pulse time, scan angle), IMU (aircraft attitude), and aircraft position (differentially corrected and optimized using the multiple DGPS base stations data) (Optech, 2003a). The inertial measurement data were used to calculate the kinematic corrections for the aircraft trajectories using PosPAC v4.1 (Applanix, 2003a and 2003b). Flight lines and LiDAR data were reviewed to insure complete coverage of the study area and positional accuracy of the laser points. (Citation: raw lidar data)
- 2020-07-24 00:00:00 - NOAA/OCM received the data from DOGAMI in LAZ format . Data were in NAD83, UTM 10N horizontally and NAVD88 (Geoid03) vertically. All units were in meters. For ingest into the Digital Coast Data Access Viewer data were converted to geographic coordinates on the GRS80 ellipsoid in meters. (Citation: processed lidar data)

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):

6. Data Documentation
The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented,

specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?
No

6.1.1. If metadata are non-existent or non-compliant, please explain:
Missing/invalid information:
- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 5.2. Quality control procedures employed
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.4. Approximate delay between data collection and dissemination
- 8.3. Approximate delay between data collection and submission to an archive facility

6.2. Name of organization or facility providing metadata hosting:
NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:
https://www.fisheries.noaa.gov/inport/item/61097

6.4. Process for producing and maintaining metadata
(describe or provide URL of description):
Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf

7. Data Access
NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?
Yes

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:
NOAA Office for Coastal Management (NOAA/OCM)

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:
https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=9160
https://coast.noaa.gov/htdata/lidar4_z/geoid18/data/9160/

7.3. Data access methods or services offered:
Data is available online for custom downloads

7.4. Approximate delay between data collection and dissemination:

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection
The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:
(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)
NCEI_CO

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

8.2. Data storage facility prior to being sent to an archive facility (if any):
Office for Coastal Management - Charleston, SC

8.3. Approximate delay between data collection and submission to an archive facility:

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?
Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection
Data is backed up to tape and to cloud storage.

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.